

# Assignment 1 - Reusable component

In this assignment we will create a reusable component which implements a predefined interface.

At the moment our units don't have any kind of hit point feature. You should create a component called Health which can be attached to the player unit as well as to enemy units. There is an interface called IHealth in the project which the Health component should implement. It should also be possible to define starting health, minimum health and maximum health from Unity editor.

## Requirements

1. The component called Health is added to the project
2. The Health component implements the IHealth interface
3. Following fields should be possible to be defined from Unity editor
  - a. Starting health (the health the unit has when it is created)
  - b. Minimum health (usually zero but could be something else too)
  - c. Maximum health
4. The functionality of the Health component works as the user could expect it to work (for example IncreaseHealth method increases health but never above the maximum health value)

## Submitting

The assignment has to be submitted Thursday 21.9. at 8:00. We will go through the assignment during the class so late submissions will be declined.

All submissions should be stored to your repository. The link to the repository should be sent to [sami.kojo@tamk.fi](mailto:sami.kojo@tamk.fi) when the assignment is done with the commit message of the submission commit. If you have a private repository, you have to send the invitation to that repository to Sami.

## Grading

- 0: The assignment is not returned on time or the assignment doesn't work at all.
- 1-2: The assignment is returned on time, but it has some flaws.
- 3: The assignment is returned on time and it works exactly as this document defines.
- 4-5: The assignment is returned on time, the code is clean and well commented.